AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (Currently amended) A method in a computer system for preventing atypical clinical events related to information identified by DNA testing a person, comprising the steps of:

receiving clinical agent information, the clinical agent information including an identifier of the agent;

accessing a data structure to determine[ing] if a gene variant is known to be associated with one or more atypical events for the clinical agent information;~~, and~~

inquiring if the person has a stored genetic test result value for the gene variant;~~, and if not,~~

accessing hereditary information for the person if the person does not have a genetic test result value for the genetic variant;

utilizing the hereditary information for the person to determine the likelihood the person has the gene variant; and

generating an output including information regarding the likelihood that the person has [a] the gene variant indicative of an atypical event based on the hereditary information.

2. (Canceled)

3. (Currently amended) The method of claim 1[2], wherein the hereditary information includes ethnicity.

4. (Canceled)

5. (Currently amended) The method of claim 1[4], wherein the accessing of the hereditary information comprises accessing the hereditary information ~~is obtained~~ from an electronic medical record of the person stored within a comprehensive healthcare system.

6. (Currently amended) The method of claim 1[2], further comprising the step of initiating a clinical action if a test result value is not available for the person and the information regarding the risks indicates a significant risk that the person ~~carries~~has the [a] gene variant associated with an atypical event.

7. (Original) The method of claim 6, wherein the clinical action is ordering a genetic test.

8. (Currently amended) A computer system embodied on one or more computer storage media having computer-executable instructions embodied thereon for preventing atypical clinical events related to information identified by DNA testing a person, comprising:

a receiving component that receives clinical agent information, the clinical agent information including an identifier of the agent;

a first accessing component for accessing a data structure to ~~a determining component that~~ determine[s] if a gene variant is known to be associated with one or more atypical events for the clinical agent information;

an inquiring component that inquires if the person has a stored genetic test result value for the ~~associated~~ gene variant;[,] ~~and~~

a second accessing component for accessing hereditary information for the person if the person does not have a genetic test result value for the gene variant;

a utilizing component for utilizing the hereditary information for the person to determine the likelihood the person has the gene variant; and

a generating component that generates an output including information regarding the likelihood that the person has [a] the gene variant indicative of an atypical event based on the hereditary information.

9. (Canceled)

10. (Currently amended) The computer system of claim 8[9], wherein the hereditary information includes ethnicity.

11. (Canceled)

12. (Currently amended) The computer system of claim 8[11], wherein the second accessing component accesses the hereditary information ~~is obtained~~ from an electronic medical record of the person stored within a comprehensive healthcare system.

13. (Currently amended) The computer system of claim 8[9], further comprising an initiating component that initiates a clinical action if a test result value is not available for the person and the information regarding the risks indicates a significant risk that the person has ~~carries~~ [a] the gene variant associated with an atypical event.

14. (Original) The computer system of claim 13, wherein the clinical action is ordering a genetic test.

15. (Currently amended) A computer-readable medium containing instructions for a method for controlling a computer system for preventing atypical clinical events related to information identified by DNA testing a person, the method comprising the steps of:

receiving clinical agent information, the clinical agent information including an identifier of the agent;

accessing a data structure to determine[ing] if a gene variant is known to be associated with one or more atypical events for the clinical agent information;~~, and~~

inquiring if the person has a stored genetic test result value for the gene variant;~~, and if not,~~

accessing hereditary information for the person if the person does not have a genetic test result value for the gene variant;

utilizing the hereditary information for the person to determine the likelihood the person has the gene variant; and

generating an output including information regarding the likelihood that the person has [a]the gene variant indicative of an atypical event based upon the hereditary information.

16. (Canceled)

17. (Currently amended) The computer-readable medium of claim 15[16], wherein the hereditary information includes ethnicity.

18. (Canceled)

19. (Currently amended) The computer-readable medium of claim 15[18], wherein the accessing of the hereditary information comprises accessing the hereditary information~~is obtained~~ from an electronic medical record of the person stored within a comprehensive healthcare system.

20. (Currently amended) The computer-readable medium of claim 15[16], further comprising the step of initiating a clinical action if a test result value is not available for the person and the information regarding the risks indicates a significant risk that the person ~~carries~~has the [a] gene variant associated with an atypical event.

21. (Original) The computer-readable medium of claim 20, wherein the clinical action is ordering a genetic test.